

AN ANALYSIS OF THE GENUS *STENOMACRA*  
STAL WITH DESCRIPTION OF FOUR NEW  
SPECIES, AND SOME TAXONOMIC REARRANGEMENTS  
(HEMIPTERA: HETEROPTERA; LARGIDAE)

HARRY BRAILOVSKY AND CRISTINA MAYORGA

Instituto de Biología, UNAM, Depto. de Zoología, Apdo Postal No. 70-153,  
México 04510, D.F., México

*Abstract.*—Four new species of *Stenomacra* Stal from Costa Rica, Ecuador, and Brazil are described and illustrated. *Stenomacra cliens* (Stal), *Stenomacra gracilis* Schmidt, and *Stenomacra marginella* var. *mexicana* Schmidt are synonymized under *Stenomacra marginella* (Herrich-Schaeffer); *Theraneis ferruginea* Mayr is transferred to the genus *Stenomacra* and synonymized under *Stenomacra scapha* (Perty); *Theraneis dissimilis* Distant is transferred to the genus *Stenomacra*, resulting on the new combination *Stenomacra dissimilis* (Distant). New distributional data are included for each species. A key to the known species of *Stenomacra* is also given.

*Key words:* Insecta, Heteroptera, Largidae, *Stenomacra*, new species, Costa Rica, Ecuador, Brazil.

---

The Neotropical genus *Stenomacra* Stal (1870) had never been revised. However, the discovery of four undescribed species and several taxonomical problems made necessary the present analysis, which incorporates new distribution data and a key to separate the known species.

The genus is characterized by a slender to elongate body, nearly parallel-sided, with the head in dorsal view and between eyes flat or slightly convex, eyes small and barely pedunculate, ocelli absent, antennal segment I uniformly slender, bucculae short, slightly elevated, and scarcely extended backward as far as the antenniferous tubercle, rostrum just reaching the posterior margin of the mesothorax, pronotum with the anterior lobe not globose and the humeral angles rounded, hemelytra macropterous or eventually submacropterous, anterior coxae unarmed and fore femora armed with two or three subdistal spines (middle and hind femora unarmed), metathoracic peritreme never auriculate, and the abdominal sternite VII of the female mesally cleft.

*Largulus* Hussey (1927) is somewhat similar to *Stenomacra*, but the rostrum reaches the metathorax, and the body and legs are remarkably more slender.

Previously, only five species of *Stenomacra*, *S. cliens* (Stal), *S. gracilis* Schmidt, *S. limbatipennis* (Stal), *S. marginella* (Herrich-Schaeffer) and *S. scapha* (Perty), and one variety, *S. marginella mexicana* Schmidt were known (Hussey and Sherman, 1929 and Schmidt 1931). In this contribution we add four new species collected in Costa Rica, Brazil and Ecuador; one species, *Theraneis dissimilis* Distant (1883), is transferred to the genus *Stenomacra*, forming the new combination *Stenomacra dissimilis*; *Theraneis ferruginea* Mayr (1865) is also transferred to *Stenomacra* but

synonymized under *S. scapha*; and *Stenomacra cliens*, *S. gracilis* and *S. marginella* var. *mexicana* are placed as new synonyms within *S. marginella*.

After this contribution, the current number of species belonging to *Stenomacra* is fixed at eight.

The following institutional abbreviations are used in the text: American Museum of Natural History, New York (AMNH); the Natural History Museum, England (BMNH); California Academy of Sciences, San Francisco, California (CAS); Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Heredia, Costa Rica (INBIO); Museo Miguel Lillo, Tucumán, Argentina (MLTA); Muséum National d'Histoire Naturelle, Paris, France (MNP); Museum National, Rio de Janeiro, Brazil (MNR); Naturhistorisches Museum, Wien, Austria (NMW); Naturhistoriska Riksmuseet, Stockholm, Sweden (NRE); Texas A. & M. University, College Station (TAMU); Instituto de Biología, Universidad Nacional Autónoma de México (UNAM); Utah State University, Utah (USU).

Synonyms and references of *Stenomacra* should be consulted in the catalogs of Hussey and Sherman (1929) and Henry and Froeschner (1988) to avoid repetition and save space. All measurements are in millimeters.

#### ***Stenomacra turrialbana*, new species**

Fig. 1

**Female. Dorsal coloration.** Head bright orange brown, with tylus and antennal segments I to IV black; pronotum light orange brown with sides of apical one third yellowish, center longitudinally and collar light orange brown, and basal third medially yellowish; scutellum light orange brown with a wide yellow longitudinal stripe extending from the base to apex; hemelytra light orange brown with following areas yellow: costal margin, basal angle of the corium, inner angle of the apical margin of corium, claval commissure, and anal border; hemelytral membrane ambarine, with outer margin darker; connexival segments with upper margin yellow, and lower one orange brown; abdominal segments bright orange brown. **Ventral coloration.** Bright reddish brown to orange brown, with bucculae, mesial gular region, prosternum, mesosternum and metasternum, upper third of acetabulae, anterior margin of mesothorax and metathorax, close stripe near posterior margin of mesothorax and metathorax, and the area neighbouring to metathoracic peritreme black; following areas yellow: quadrate spot in the anterior margin of prothorax, metathoracic peritreme, mesial and wide longitudinal stripe running from III to VI abdominal sterna, pleural margin of abdominal sterna III to VII, paratergite VIII and external margin of paratergite IX; rostral segments I and IV bright black, II bright orange brown, and III bright orange brown with apical third bright black; legs reddish black, with trochanters dirty yellow. **Structure.** Body slender, nearly parallel-sided; head, pronotum, scutellum, clavus, corium, thorax, and abdominal sterna with long, slender, erect setae, intermixed with short decumbent silvery setae. **Head.** Dorsally between eyes almost flat; eyes barely pedunculate; bucculae short, elevated, extending only to anterior margin of antenniferous tubercles; rostrum reaching posterior margin of mesothorax. **Thorax. Pronotum.** Trapezoidal, wider than long, and markedly bilobed with transverse impression deeply punctate; collar wide; anterior pronotal lobe with lateral margins rounded; posterior pronotal lobe with lateral margins obliquely

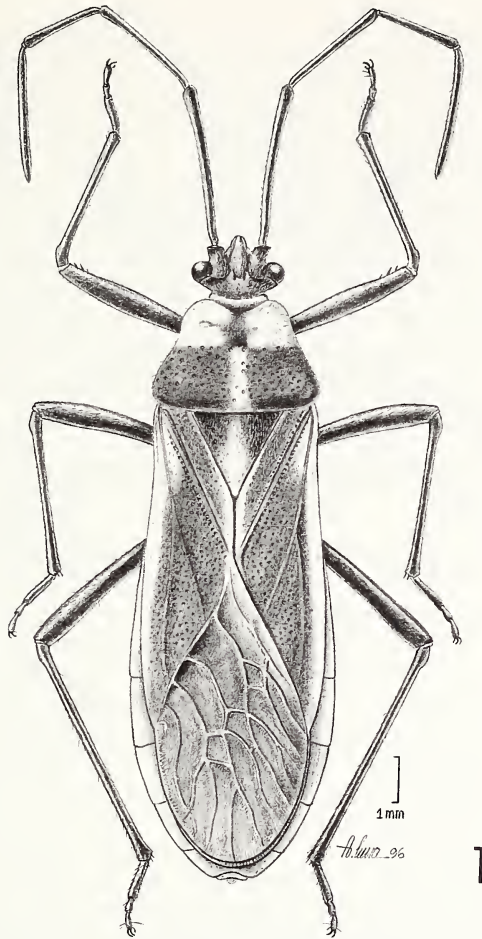


Fig. 1. *Stenomacra turrialbana*, new species, dorsal view.

straight; anterior lobe impunctate; posterior lobe with scattered punctation; posterior border straight; humeral angles rounded. *Legs*. Covered with fine adpressed silvery setae, intermixed with long silvery setae; fore femora armed with three single ranked, of long subapical spines; middle and hind femora unarmed. *Scutellum*. Triangular, slightly longer than wide, and flat; each side of anterior third of scutellar disc punctate. *Hemelytra*. Macrpterous, reaching the apex of the last abdominal segment; clavus and corium punctate; costal margins virtually straight.

*Measurements*. Length head: 2.00; width across eyes: 2.12; interocular space: 1.20; preocular distance: 1.08; length antennal segments: I, 3.72; II, 2.12; III, 1.32; IV, 2.68. Pronotal length: 2.68; maximum width of anterior lobe: 2.40; maximum width of posterior lobe: 3.76. Scutellar length: 1.72; width: 1.66. Total body length: 14.10.

*Variation*. 1. Rostral segments II and III bright black.

**Male.** Unknown.

**Holotype female.** COSTA RICA: PROVINCIA CARTAGO: Grano de Oro, Chirripo, Turrialba (1120 mts.), IX.1992. P. Campos. Deposited in INBIO.

**Paratypes.** Five females: COSTA RICA: PROVINCIA CARTAGO: Grano de Oro, Chirripo, Turrialba (1120 mts.), 8-30.VII.1992, 8-31.VIII.1992 and IX.1992. P. Campos. Deposited INBIO and UNAM.

**Discussion.** This new species is very distinct. The pronotum is light orange brown with the sides of its apical third, as well as a wide longitudinal stripe extending from its base to the middle third, yellowish. *Stenomacra dissimilis* (Distant), also recorded from Costa Rica, has the corium black with costal and apical margins, as well as the basal angle and claval suture yellow. The pronotal disc has another type of coloration. In *S. turrialbana* the corium is light orange brown with only the costal margin, the basal angle and the inner angle of the apical margin yellow.

**Etymology.** Named for the type locality, Turrialba.

### *Stenomacra tungurahua*, new species

Fig. 2

**Male.** *Dorsal coloration.* Head, including antennal segments and rostral segments black, with basal join of antennal segment I red orange; pronotum red orange with callar region black; scutellum black with apex red orange; clavus and corium red orange; hemelytral membrane white; connexival segments black with upper border red orange; abdominal segments black. *Ventral coloration.* Black, with the external margin of bucculae, anterior, lateral and posterior margin of prothorax, apex of metathoracic peritreme, pleural margins of abdominal sterna and posterior margin of the genital capsule red orange. *Structure.* Similar to *S. turrialbana*. Rostrum reaching anterior third of metathorax. Scutellar disc scattered punctate. *Genital capsule.* Posteroventral edge entire, almost straight.

*Measurements.* Length head: 1.44; width across eyes: 1.84; interocular space: 1.08; preocular distance: 1.03; length antennal segments: I, 3.28; II, 1.88; III, 1.12; IV, 2.76. Pronotal length: 2.00; maximum width of anterior lobe: 2.08; maximum width of posterior lobe: 3.44. Scutellar length: 1.60; width: 1.56. Total body length: 12.85.

**Female.** *Coloration.* Similar to the male. Connexival segments VIII and IX red orange; abdominal segment VIII black with posterior margin red orange, and IX red orange; genital plates black with external margin red orange. *Measurements.* Length head: 1.56; width across eyes: 1.88; interocular space: 1.20; preocular distance: 1.00; length antennal segments: I, 2.96; II, 1.80; III, 1.08; IV, 2.40. Pronotal length: 2.28; maximum width of anterior lobe: 2.12; maximum width of posterior lobe: 3.32. Scutellar length: 1.40; width: 1.52. Total body length: 12.90.

**Variation.** 1. Posterior margin of abdominal sternite VII red orange.

**Holotype male.** ECUADOR: PROVINCIA TUNGURAHUA: Baños, 24.VII.75. J. Longino. Deposited in UNAM.

**Paratypes.** Two males, two females: ECUADOR: PROVINCIA TUNGURAHUA: Baños (1800 mts.), 4-5.IV.58. W. Weyrauch. Deposited in MLTA and UNAM. One female: ECUADOR: Baños, 20.II.37. S. W. Frost. Deposited in USNM. One male, one female: ECUADOR: Quito, 1930. R. Benoist. Deposited MNP.

**Discussion.** As in *Stenomacra scapha* (Perty), the clavus and corium are red orange,

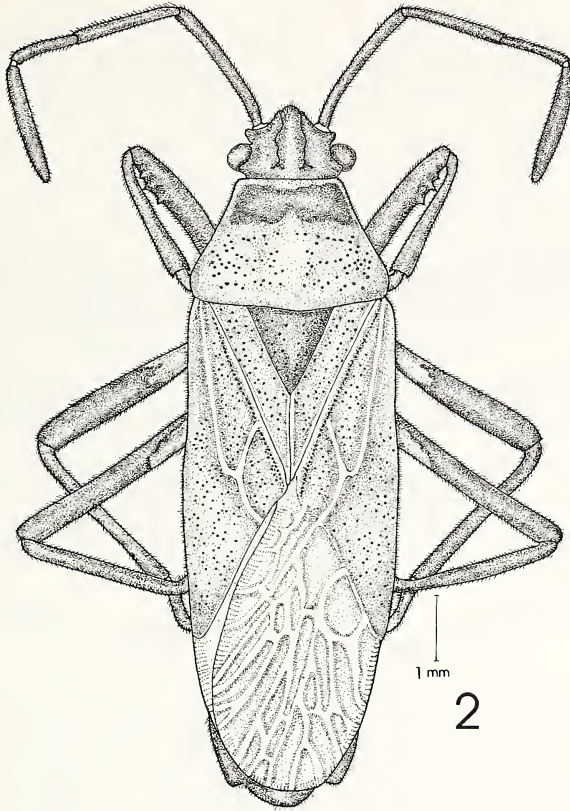


Fig. 2. *Stenomacra tungurahuana*, new, species, dorsal view.

and the hemelytral membrane is white. However *S. tungurahuana* is macropterous, the hemelytra reaching the apex of the last abdominal segment; antennal segments I to III, the callar region of the pronotal disc, and the tibiae are black. *S. scapha* is submacropterous, the hemelytra reaching the posterior margin of abdominal segment VI; antennal segments I to III, the callar region and the tibiae are red orange to pale orange.

**Etymology.** Named for its occurrence on Tungurahua.

***Stenomacra magna*, new species**

Fig. 3

**Male. Dorsal coloration.** Head including antennal segment I to III bright orange chestnut; antennal segment IV with anterior half bright orange chestnut, and posterior half dark brown; pronotum light yellow with callar region and punctures bright orange chestnut; scutellum bright orange chestnut; clavus and corium light yellow with diffuse brown shadow area; hemelytral membrane light ambarine; connexival segments bright orange with upper and lower margin yellow; abdominal segments

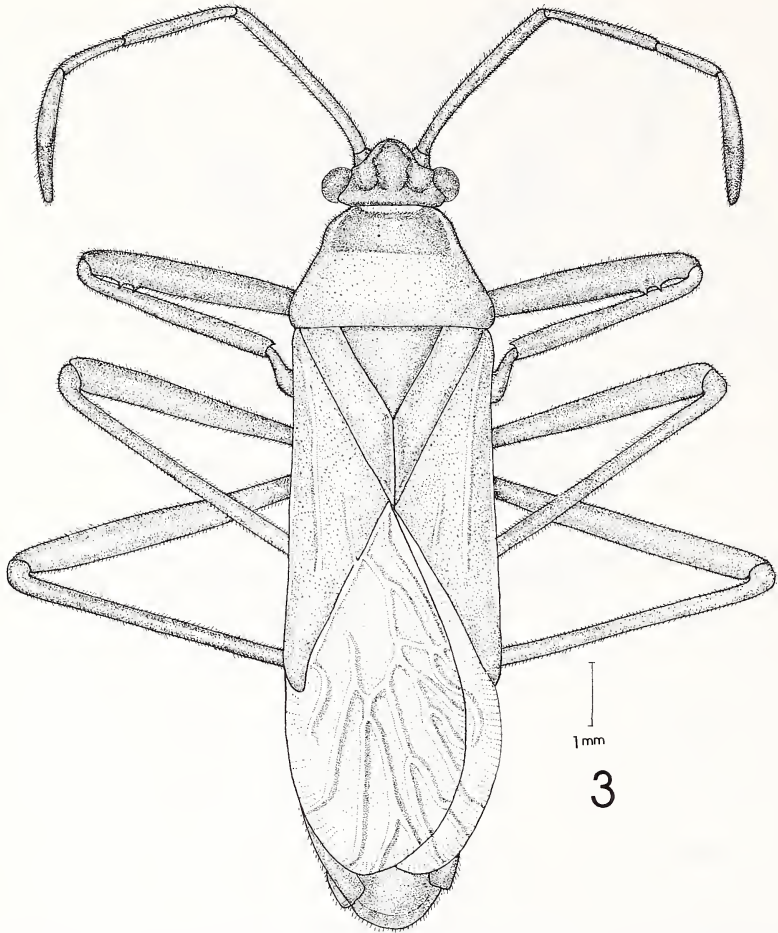


Fig. 3. *Stenomacra magna*, new species, dorsal view.

bright orange. *Ventral coloration.* Head including rostral segments I to III bright orange chestnut; rostral segment IV black with basal third bright orange chestnut; thorax bright orange chestnut with sternal region black, and following areas yellow: acetabulae, anterior and posterior margin of the prothorax, posterior margin of mesothorax and metathorax, and metathoracic peritreme; legs bright orange; abdominal sterna bright orange, with pleural margin yellow, and anterior margin of each sternite black; genital capsule bright orange, with yellow spot on the middle of the body. *Structure.* Similar to *S. turrialbana*. Rostrum reaching posterior third of mesothorax; scutellum wider than long or as longer as wide. *Genital capsule.* Posteroventral edge entire, almost straight.

*Measurements.* Length head: 1.40; width across eyes: 2.00; interocular space: 1.16; preocular distance: 1.00; length antennal segments: I, 3.44; II, 1.64; III, 1.06; IV,

2.80. Pronotal length: 2.24; maximum width of anterior lobe: 2.08; maximum width of posterior lobe: 3.08. Scutellar length: 1.32; width: 1.32. Total body length: 13.00.

**Female.** *Color.* Similar to male. Connexival segments, abdominal segments, and genital plates bright orange yellow; metathoracic peritreme bright orange. *Measurements.* Length head: 1.48; width across eyes: 2.08; interocular space: 1.20; preocular distance: 1.00; length antennal segments: I, 3.56; II, 1.80; III, 1.08; IV, 2.64. Pronotal length: 2.44; maximum width of anterior lobe: 2.24; maximum width of posterior lobe: 3.56. Scutellar length: 1.48; width: 1.56. Total body length: 14.40.

**Holotype male.** BRAZIL: NOVA TEUTONIA: Santa Catarina, 27 11'N-52 23'W, XII.1967. F. Plaumann. Deposited in TAMU.

**Paratype female.** One female: BRAZIL: NOVA TEUTONIA: Santa Catarina, 27 11'N- 52 23'W, 28.I.1967. F. Plaumann. Deposited in UNAM.

**Discussion.** This unique species can be distinguished by having antennal segments I to III bright orange, and IV bicolorous, the clavus and corium light yellow with a diffuse brown area, and the legs entirely bright orange.

In *Stenomacra limbatipennis* (Stal), antennal segments I to IV and the legs are black to reddish brown, and the corium is never entirely yellow; the clavus of *S. limbatipennis* is black with the claval commissure yellow.

**Etymology.** Named for its large size; from the Latin word, *magnus*.

### ***Stenomacra atra*, new species**

Fig. 4

**Male.** *Dorsal coloration.* Head, antennal segment I, anterior pronotal lobe, and scutellum (apex dark orange) black; antennal segments II to IV yellow with basal third of II and apical third of IV reddish brown to black; posterior pronotal lobe dark orange red; clavus yellow; corium yellow with the apical margin and a longitudinal median stripe, covered the endocorium reddish brown; hemelytral membrane dirty white; connexival segments I to V orange, and VI and VII black, with upper and anterior margin orange; abdominal segments orange with diffuse brownish spots. *Ventral coloration.* Including rostral segments I to IV and legs reddish brown to black; posterior margin of prothorax orange brown; tarsi bright chestnut orange; abdominal sterna with pleural margins III to VII, and posterior margin of VII orange; metathoracic peritreme with the lobe dirty yellow; genital capsule black with median body yellow. *Structure.* Similar to *S. turrialbana*. Rostrum reaching anterior third of metathorax. Scutellar disc scattered punctate. *Genital capsule.* Posteroventral edge entire, narrow, and almost straight. *Pubescence.* Head, exposed parts of thorax, abdomen, scutellum, legs, clavus and corium with short, fine, suberect pubescence, intermixed with long erect hairs; head in dorsal view densely set with silvery adpressed hairs; thoracic pleura and lateral areas of abdominal sternite III to V, and eventually VI with patches of very dense, felted silvery pubescence.

*Measurements.* Length head: 1.60; width across eyes: 2.16; interocular space: 1.20; preocular distance: 1.12; length antennal segments: I, 3.80; II, 1.84; III, 1.18; IV, 3.20. Pronotal length: 2.40; maximum width of anterior lobe: 2.20; maximum width of posterior lobe: 3.20. Scutellar length: 1.44; width: 1.32. Total body length: 14.10.

**Female.** Color and structure similar to the male. Anterior pronotal lobe black with callar region bright orange; scutellum dark orange with lateral margins black; ab-

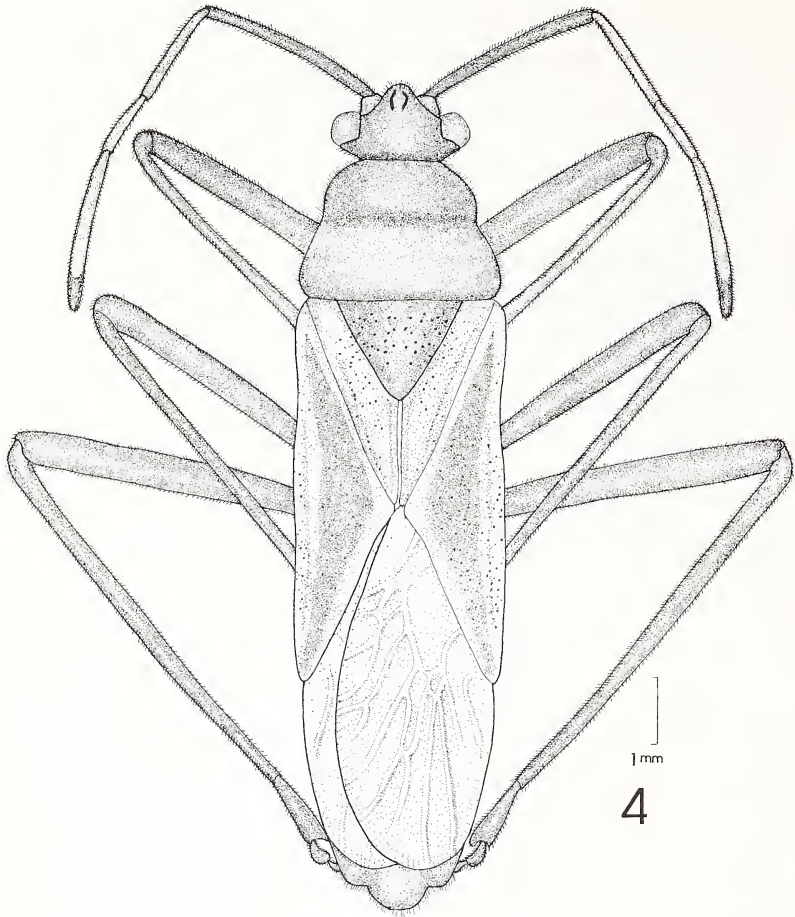


Fig. 4. *Stenomacra atra*, new species, dorsal view.

dominal segments light orange with anterior margin brown; abdominal sterna reddish brown with pleural margins III to V yellow, and VI and VII dark orange to reddish brown; genital plates yellow.

*Measurements.* Length head: 1.68; width across eyes: 2.24; interocular space: 1.34; preocular distance: 1.12; length antennal segments: I, 3.92; II to IV absent. Pronotal length: 2.56; maximum width of anterior lobe: 2.42; maximum width of posterior lobe: 3.40. Scutellar length: 1.48; width: 1.42. Total body length: 14.52.

**Holotype male.** BRAZIL: Bahia (without data). Deposited NMW.

**Paratype.** One female: BRAZIL (without data). Deposited UNAM.

**Discussion.** This new species superficially resembles *Stenomacra limbatipennis* (Stal) in size and shape. Both have completely reddish brown to black legs. It is however readily distinguishable by the yellow clavus, as well as by the yellow corium with its apical margin and a large irregular elongate brown stripe. In addition



the hemelytral membrane is dirty white. In *S. limbatipennis* the clavus and corium are black with the anal border, claval commissure, and costal margin of the corium yellow, with the hemelytral membrane dark brown.

**Etymology.** From the Latin, *atra*, black.

*Stenomacra limbatipennis* (Stal)

*Theraneis limbatipennis* Stal, 1860: 45

This is a readily recognizable species by virtue of its completely black to reddish brown antennal segments I to IV, and legs, and by having the pronotum, scutellum, and hemelytra black with following areas yellow: posterior margin of pronotum, apex of scutellum, anal border and claval commissure, and costal margin of the corium; hemelytral membrane dark brown.

The relation of this species with *S. atra* is given under the preceding species.

**Types.** Stal (1860) described this species from a single female specimen. The type of *Theraneis limbatipennis*, housed in the Naturhistoriska Riksmuseet, Stockholm, Sweden, was examined. The label data for the holotype specimen is Brazil, F. Sahlb. The type locality is Rio de Janeiro.

Bergroth (1905) recorded this species from Minas Gerais, Brazil.

**Material examined.** One male from Brazil (without data) and one female from, BRAZIL. RIO DE JANEIRO, Itatiaya Maromba, 20.I.1925. J. F. Zikan. Deposited in AMNH and UNAM.

**Distribution.** Brazil.

*Stenomacra dissimilis* (Distant), **New Combination**

*Theraneis dissimilis* Distant, 1883: 225.

*Theraneis dissimilis* Brailovsky, 1991: 636.

Individuals of this species are medium sized with the head (bucculae black or yellow), antennal segments I to IV, and legs black; pronotal disc black with each margin yellow; corium yellow with a large, irregular and elongate median black spot; hemelytral membrane dark brown, and connexival segments light yellow.

*Stenomacra marginella* (Herrich-Schaeffer) has antennal segments I to IV, tibiae and tarsi black, but the antenniferous tubercles, coxae, trochanters, and femora (except the black dorsal subapical face) light orange yellow, and the connexival segments are black with upper margin yellow.

**Types.** Distant (1883) described *Theraneis dissimilis* from at least three specimens, two from Costa Rica (Cache) and one from Panama (Bugaba). The types are housed in the Natural History Museum, London. A female paralectotype was examined. The label data are Panama, Bugaba, Champion.

**Material examined.** One female, COSTA RICA: Provincia Alajuela, sector San Ramon, 620 mts., 11-15.IV.1994. E. Lopez. Deposited in INBIO. Two females, COSTA RICA: Provincia Alajuela, 20 km., S. Upala, 1-10.VIII.1991 and 10-21.V.1991. F. D. Parker. Deposited in USU. Six females, COSTA RICA, Provincia Guanacaste, Parque Nacional Guanacaste, Estación Pitilla, 9 km., S. of Sta. Cecilia, 700 mts., VII.1988, I.1989, XII.1989, II.1990, 29.IV.1992. Deposited in INBIO and UNAM. One female, COSTA RICA, Provincia Guanacaste, Estación Cacao, SW., side of

Volcan Cacao, 1000-1400 mts., (Malaise Trap), 1988-1989 (without data). Deposited in INBIO.

**Distribution.** Costa Rica and Panama.

*Stenomacra marginella* (Herrich-Schaeffer)

*Largus marginellus* Herrich-Schaeffer, 1850: 182.

*Theraneis cliens* Stal, 1862: 315. NEW SYNONYMY.

*Stenomacra marginella*: Stal, 1870: 98.

*Stenomacra cliens*: Stal, 1870: 98.

*Stenomacra cliens*: Hussey & Sherman, 1929: 25.

*Stenomacra marginella*: Hussey & Sherman, 1929: 26.

*Stenomacra marginella*: Schmidt, 1931: 44.

*Stenomacra marginella* var. *mexicana* Schmidt, 1931: 44. **New Synonymy.**

*Stenomacra gracilis* Schmidt, 1931: 45. **New Synonymy.**

*Stenomacra marginella*: Blöte, 1931: 99.

This is a readily recognizable species by virtue of having antennal segments I to IV, rostral segments I to IV, tibiae and tarsi completely black to reddish brown, and by having the following areas always orange to orange yellow: antenniferous tubercles, bucculae, pronotal margins including the collar, costal margin of the corium, anal suture and commissure claval, apex of scutellum, upper margin of connexival segments, acetabulae, coxae, and trochanters.

**Variation.** This species is extremely variable in coloration, and several color forms can be found into the same population. 1. Head in dorsal view black or light orange, or only with the space close to the eyes black. 2. Anterior lobe of the pronotum orange or yellow and posterior lobe black, with or without median longitudinal orange to yellow stripe, or anterior and posterior lobe black with a median longitudinal yellow stripe, or both lobes with a diffuse yellow mark on a light brown background. 3. Scutellum black with the apex orange to yellow, or scutellar disc orange to yellow with basal third black. 4. Femora completely black or reddish brown, or completely bright orange, or well intermixed with basal third orange and the rest black, or orange with only the dorsal face of the apical third black, and other variants.

**Types.** Herrich-Schaeffer (1850) described *Largus marginellus* from Brazil but the type could not be located. The description, however, is adequate enough to fit this species. Stal (1862) described *Theraneis cliens* from Mexico and the type located in the Naturhistoriska Riksmuseet, Stockholm, was examined. Schmidt (1931) described *Stenomacra marginella* var. *mexicana* from Mexico and *Stenomacra gracilis* from Colombia but the types could not be located, however more than 150 specimens were examined and compared with the original descriptions which fit this species. Until further evidence is discovered, it seems best to produce these nominal taxa as synonyms due to the lack of morphological characters that would allow us to separate the taxa, as well as the extraordinary chromatic variation found among the long series of specimens examined.

Walker (1873) recorded this species from two Mexican localities Orizaba in the State of Veracruz and from Oaxaca. Distant (1880-1893) recorded this species from México including Coahuila (Parras, and Saltillo); Jalisco; Morelos (Cuernavaca);

Guerrero (Amula, Chilpancingo, and Xucumanatlan); Veracruz (Jalapa, and Orizaba). Guatemala (Capetillo, and San Gerónimo). Nicaragua (Chontales). Panama (Volcan de Chiriqui). Colombia (Bogota, and Antioquia). As well as from Brazil. Barber (1910) mentioned this species from Arizona (Huachuca Mts.) in the United States of America, and Blöte (1931) from California (United States of America) and from San Jose (Costa Rica). Henry and Froeschner (1988) in their catalogue recorded this species from the United States of America (California, Arizona, and New México).

**Material examined.** Three males from UNITED STATES OF AMERICA: Arizona, Portal (S.W. Res. Sta.) (5400'), 10.VI.1969. W. M. Nunes and T. H. Halstead. Deposited UNAM. Two males, three females from MEXICO: Nayarit, km., 98 road Guadalajara-Tepic, 27.VII.1984. E. Barrera and A. Ibarra. Deposited UNAM. One male, three females from MEXICO: Durango, 10 mi., N.W. Las Nieves (6500'), 1.VII.1971. C. W. O'Brien. Deposited UNAM. One male, one female from MEXICO: Durango, Presa Peña, 6.VIII.1979. E. Barrera. Deposited UNAM. One male, one female from MEXICO: Colima, Colima, IX.1940. C. Hoffmann. Deposited UNAM. One male from MEXICO: Jalisco, Teocatliche, 22.VIII.1970. B. Villegas. Deposited UNAM. Three males from MEXICO: Jalisco, km., 93 road Guadalajara-Ixtlan, 7.VII.1982. H. Brailovsky. Deposited UNAM. Five females from MEXICO: Jalisco, Chamela, 3.XII.1976. H. Brailovsky. Deposited UNAM. One male, two females from MEXICO: Michoacan, 8 mi., W. of Patzcuaro (7600'), 14.VIII.1982. O'Brien and Wibmer. Deposited UNAM. One female from MEXICO: Guerrero, Chapa, 26.VII.1975. R. Medellin. Deposited UNAM. One female from MEXICO: Guerrero, Chichihualco (1250 mts.), 6.VII.1979. H. Brailovsky. Deposited UNAM. 19 males, 14 females from MEXICO: Morelos, Cautla, 17.VI.1966, 22.VI.1969, 8-12.V.1970, 28.VIII.1970, 15.VIII.1984, 20.V.1989. H. Brailovsky. Deposited UNAM. Six males, 8 females from MEXICO: Morelos, Yautepec, 6.VI.1981. H. Brailovsky. Deposited UNAM. Nine males, eleven females from MEXICO: Morelos, Tepoztlan, 6.VI.1976, 25.II.1977, 9.IX.1977, 5.V.1980, 3.IV.1981. E. Mariño, E. Gonzalez, J. Butze, E. Barrera. Deposited UNAM. Two females from MEXICO: Morelos, Tetela del Volcan, 30.VI.1982. A. Ibarra. Deposited UNAM. Two males, one female from MEXICO: Estado de Mexico, Malinalco, 28.IV.1984. H. Brailovsky. Deposited UNAM. Two males, four females from MEXICO: Estado de Mexico, Valle de Bravo, 3.VII.1969, 18.V.1973. H. Brailovsky. Deposited UNAM. 12 males, 17 females from MEXICO: Distrito Federal, Pedregal de San Angel (Jardin Botanico, UNAM), 17.IV.1968, 11.V.1968, 12.VI.1968. H. Gonzalez Almada. Deposited UNAM. One male, one female from MEXICO: Distrito Federal, Jalpan, 26.IV.1975. C. Beutelspacher. Deposited UNAM. Three males, three females from MEXICO: Distrito Federal, Xochimilco (Tepepan), 10.V.1969, 11.IV.1975, 2.VII.1990. L. Rivera, W. Brailovsky, E. Martin. Deposited UNAM. Two males, three females from MEXICO: Hidalgo, Tasquillo, 15.VII.1979. H. Brailovsky. Deposited UNAM. Two males from MEXICO: Hidalgo, Tecozautla, 18.V.1996. E. Barrera, H. Brailovsky. Deposited UNAM. Three females from MEXICO: Hidalgo, Santiago de Anaya, 21.IV.1990. C. Mayorga. Deposited UNAM. Two females from MEXICO: Guanajuato, Guanajuato, 29.V.1975. P. Rojas. Deposited UNAM. One female from MEXICO: Guanajuato, Salamanca, 25.IX.1975. J. Bueno. Deposited UNAM. Two males from MEXICO: Queretaro, Queretaro, 6.IV.1977. J. Garcia Figueroa. Deposited UNAM. Three males, one female from MEXICO: Puebla, Tecamachalco, 27.II.1992. G. Ortega Leon, C.

Mayorga, E. Barrera. Deposited UNAM. Four females from MEXICO: Puebla, San Esteban (Necoxcalco), 27.IX.1992, 15.X.1992. E. Barrera, H. Brailovsky, C. Mayorga. Deposited UNAM. Two males, three females from MEXICO: Puebla, Tehuacan, 27.II.1992, 27.IX.1992. E. Barrera, C. Mayorga, G. Ortega Leon. Deposited UNAM. One female from MEXICO: Puebla, Atlixco (La Trinidad), 25.IV.1994. E. Barrera, H. Brailovsky. Deposited UNAM. Three males, four females from MEXICO: Veracruz, Las Minas, 16.IX.1982. E. Barrera, H. Brailovsky. Deposited UNAM. One male, one female from MEXICO: Veracruz, Estación de Microondas de Fortin, 15.VII.1980. E. Barrera. Deposited UNAM. One male from MEXICO: Veracruz, Conejos, 13.VIII.1984. H. Brailovsky. Deposited UNAM. One female from MEXICO: Veracruz, Orizaba (1880 mts.), 15.VIII.1975. A. N. Garcia Aldrete. Deposited UNAM. One female from MEXICO. Oaxaca, Mitla, 26.V.1970. H. Brailovsky. Deposited UNAM. One male from MEXICO: Oaxaca, Portillo del Rayo (Jalatengo), 21.X.1982. H. Brailovsky. Deposited UNAM. One male, one female from MEXICO: Oaxaca, Monte Alban, 27.III.1990. E. Barrera, A. Cadena. Deposited UNAM. One female from MEXICO: Oaxaca, km., 193 road Teotitlan-Oaxaca, 15.III.1989. A. Cadena, L. Cervantes. Deposited UNAM. Three males, seven females from MEXICO: Oaxaca, km., 47 road Huajuapán de Leon-Oaxaca (2010 mts.), 8.VII.1995. E. Barrera, G. Ortega Leon. Deposited UNAM. One male from MEXICO: Chiapas, Unión Juárez, 21.IV.1983. E. Barrera. Deposited UNAM. One female from MEXICO: Chiapas, Reserva El Triunfo, 6.VII.1993. C. Mayorga. Deposited UNAM. Three males, three females from COSTA RICA: San Jose (Sta. Maria de Dota), 30.IV.1984. E. Barrera. Deposited UNAM. Two females from COLOMBIA: 27 mi., South of Pasto Narino (1960 mts.), 28.II.1955. E. I. Schlinger, E. S. Ross. Deposited CAS. One female from VENEZUELA: Merida, km., 20 road Merida-El Morro, 20.XI.1992. Deposited UNAM.

*Stenomacra scapha* (Perty)

*Lygaeus scapha* Perty, 1833: 172.

*Largus incisus* Herrich-Schaeffer, 1850: 182.

*Theraneis ferruginea* Mayr, 1865: 436. **New Synonymy.**

Brailovsky (1991) revised the genus *Theraneis* Spinola. He described four new species and included a key to separate the known taxa. However, *T. constricta* Stal, *T. ferruginea* Mayr, and *T. isobel* Hussey were not included in the key since there were no specimens available and the corresponding types not located at the time. Recently, the authors had the opportunity to examine the type of *T. ferruginea*, which is deposited in the Naturhistorisches Museum, Wien. As a result, this species has been transferred to the genus *Stenomacra* and synonymized under *S. scapha* (Perty). The latter species is distinguished by submacropterous individuals with whitish hemelytral membrane; also the head, antennal segments, pronotum, legs and abdomen are reddish brown. Its distributional range is restricted to Brazil, the same area from where its new synonym was collected.

**Types.** Perty (1833) described this species from a single male specimen. The type was not located, but the description and figure, are adequate to determine its identify. The type specimen of *Largus incisus* Herrich-Schaeffer (1850) was not examined, but the figure in the original description is of a specimen identical to *S. scapha*.

Mayr (1865) described *Theraneis ferruginea* and the type specimen is a female located in the Naturhistorisches Museum, Wien. The type was examined and it has the following label data: Brasilien, Schott. The latter species has been transferred to the genus *Stenomacra* and synonymized under *S. scapha*. Hussey (1929) recorded this species from Rio de Janeiro and Minas Geraes in Brazil.

**Material examined.** One female from, BRAZIL: Petropolis, II. 1857. In MNP. One male, two females from BRAZIL: Rio de Janeiro, Itatiaya, 1200 mts., 26.XII.1953, Seabra and Alvarenga. Deposited in AMNH and UNAM. Three males, one female from BRAZIL: Rio de Janeiro, Itatiaya, 29.XII.1950. C. Leite, Seabra and Zickan. Deposited in MNR and UNAM.

#### KEY TO *STENOMACRA* SPECIES

1. Antennal segment I bright orange . . . . . 2
- 1' Antennal segment I black to dark reddish brown . . . . . 3
2. Antennal segment IV black with basal third orange; submacropterous, with the hemelytral membrane reaching anterior margin of abdominal segment VI; posterior lobe of the pronotum, clavus and corium light orange red (Brazil) . . . . . *scapha* (Perty)
- 2' Antennal segment IV orange with apical third black; macropterous, with the hemelytral membrane almost reaching the apex of the last abdominal segment; posterior lobe of the pronotum, clavus and corium yellow (Brazil) . . . . . *magna*, new species
3. Antennal segments II and III yellow (Brazil) . . . . . *atra*, new species
- 3' Antennal segments II and III black . . . . . 4
4. Clavus and corium bright orange red; hemelytral membrane white (Ecuador) . . . . .  
. . . . . *tungurahuana*, new species
- 4' Clavus and corium never bright orange red; hemelytral membrane light brown . . . . . 5
5. Anterior margin of the pronotum and collar black to bright reddish brown . . . . . 6
- 5' Anterior margin of the pronotum and collar yellow to orange . . . . . 7
6. Pronotum black with humeral angles and posterior margin yellow; scutellum black with apex ochre; lower margin of acetabulae yellow (Brazil) . . . . . *limbatipennis* (Stal)
- 6' Pronotum light orange brown with sides of apical one third, and basal third medially yellowish; humeral angles light orange brown; scutellum light orange brown with a wide yellow longitudinal stripe running from the base to the apex; lower margin of acetabulae reddish brown (Costa Rica) . . . . . *turrialbana*, new species
7. Coxae and trochanters black; antenniferous tubercle black (Costa Rica, Panama) . . .  
. . . . . *dissimilis* (Distant)
- 7' Coxae and trochanters bright orange yellow; antenniferous tubercle bright orange yellow (United States of North America, México, Guatemala, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Brazil) . . . . . *marginella* (Herrich-Schaeffer)

#### ACKNOWLEDGMENTS

We would like to thank the following individuals and institutions for their help in lending specimens pertinent to this project: Dr. R. T. Schuh (AMNH); Mrs. Janet Margerison-Knight (BMNH); Dr. Norman D. Penny (CAS); Mr. Jesus Armando Ugalde Gomez (INBIO); Dra. Maria del Valle Ajmat de Toledo (MLTA); Dra. Dominique Pluot (MNP); Dr. Jose Candido de Melho Carvalho (MNR); Dra. Ulrike Aspöck and Dr. Herbert Zettel (NMW); Dr. Per Lindskog (NRE); Dr. Joseph C. Schaffner (TAMU); Dr. Wilford J. Hanson (USU). Special thanks to Dr. Manuel Balcazar (UNAM), Dr. Atilano Contreras (UNAM), and Biol. Ernesto Barrera (UNAM) for their comments on an early version of the manuscript, and to Mr. Albino Luna for the preparation of the dorsal view illustration of *Stenomacra turrialbana*.

## LITERATURE CITED

- Barber, H. G. 1910. Some Mexican Hemiptera-Heteroptera new to the fauna of the United States. *J. N. Y. Entomol. Soc.* 18:34-39.
- Bergroth, E. 1905. Rhynchota Neotropica. *Rev. d' Ent.* 24:104-112.
- Blote, H. C. 1931. Catalogue of the Pyrrhocoridae in 'S Rijks Museum van Natuurlijke Historie. *Zool. Meded.* 14:97-136.
- Brailovsky, H. 1991. Four new species of the Neotropical genus *Theraneis* Spinola (Hemiptera: Heteroptera: Largidae). *J. New York Entomol. Soc.* 99(4):630-636.
- Distant, W. L. 1880-1893. *Insecta. Rhynchota. Hemiptera-Heteroptera. Biologia Centrali-Americana.* London: 1-462.
- Henry, T. J., and R. C. Froeschner. 1988. Catalog of the Heteroptera or true bugs, of Canada and the Continental United States. *E. J. Brill:* 1-958.
- Herrich-Schaeffer, G. A. W. 1850. Die Wanzenartigen Insekten 9:181-217. C. H. Zeh'schen Buchhandlung, Nurnberg.
- Hussey, R. F. 1927. On some American Pyrrhocoridae (Hemiptera). *Bull. Brooklyn Entomol. Soc.* 22(4):227-235.
- Hussey, R. F and E. Sherman. 1929. General Catalogue of the Hemiptera. Fascicle III Pyrrhocoridae. Publ. Smith College, Northampton, MA, USA: 1-144.
- Mayr, G. L. 1865. Diagnosen neuer Hemipteren. *Verh. Zool.-Bot. Ges. Wien.* 15:429-446.
- Perty, M. 1830-1834. Delectus animalium articulorum, quas in itinere per Brasiliam annis 1817-1820, jussu et auspiciis Maximiliana Josephi Bavariae regis augustissimi peracto, colegerunt Dr. J. B. de Spix et Dr. C. F. Ph. de Martius. *Monachii:* 1-224.
- Schmidt, E. 1931. Zur Kenntnis der Familie Pyrrhocoridae Fieber. (Hemiptera-Heteroptera). *Stett. Entomol. Ztg.* 92(1):1-51.
- Stal, C. 1860. Bidrag till Rio Janeiro-traktens Hemipter-Fauna. *Kongliga Svenska Vetenskaps-Akademiens Hand, II(7):*1-84.
- Stal, C. 1862. Hemiptera Mexicana enumeravit speciesque novas descripsit. *Stettin. Entomol. Ztg.* 23:287-325.
- Walker, F. 1873. Catalogue of the specimens of Hemiptera Heteroptera in the collection of the British Museum. Part VI.: 1-210.

Received 7 February 1997; accepted 21 June 1997.